

NAGIYEV, M.F.; KARAMZIN, P.V.; GUSEYNOVA, A.M.

Application of the theory of the steady-state thermal  
conditions of exothermic reactions to the solution of  
practical problems. Azerb.khim.zhur. no.4:69-74 '60.  
(MIRA 14:8)

(Ethylene oxide) (Thermochemistry)

NAGIYEV, M.F.; KARAMZIN, P.V.; GUSEYNOVA, A.M.

Determination of operating conditions for the thermal stability  
of a steady state of exothermic reactions. Azerb.khim.zhur. no.6:  
33-40 '59. (MIRA 14:9)

(Heat of reaction)

*GUSEYNOVA, B.F.*

KARAYEV, A.I.; GUSEYNOVA, B.F.

Effect of stimulation of gastric and hepatic interoceptors on ciliary movement. Biul. eksp.biol. i med. 38 no.12:7-9 D '54. (MLRA 8:3)

1. Iz kafedry fiziologii cheloveka i zhivotnykh Azerbaydzhanskogo Gosudarstvennogo universiteta imeni S.M.Kirova, Baku.

(ESOPHAGUS, physiology,

eff. of liver & stomach stimulation on ciliary movement in frogs)

(STOMACH, physiology,

eff. of stimulation on esophageal ciliary movement in frogs)

(LIVER, physiology,

eff. of stimulation on esophageal ciliary movement in frogs)

*Det. -  
Two chair physiology of human & animals*

GUSEYNOVA, B.F.

New and rare fungus species collected in the Nagorno-Karabakh  
Autonomous Province. Izv. AN Azerb. SSR. Ser. biol. i med.nauk no.9:  
3-9 '61. (MIRA 14:12)  
(NAGORNO-KARABAKH AUTONOMOUS PROVINCE--FUNGI, PHYTOPATHOGENIC)

GUSHYANOVA, B.P.

Some data on the species of fungi in the Nagorno-Karabakh  
Autonomous Province. Izv. AN Azerb. SSSR. Ser. biol. i med.  
nauk no. 12:17-23 '61. (MIRA 17:5)

ACCESSION NR: AP4004877

S/0181/63/005/012/3620/3621

AUTHOR: Ismaylov, F. I.; Guseynova, E. S.; Akhundov, G. A.

TITLE: Optical absorption edge of GaS and GaSe single crystals

SOURCE: Fizika tverdogo tela, v. 5, no. 12, 1963, 3620-3621

TOPIC TAGS: gallium sulfide, gallium selenide, optical absorption, optical absorption edge

ABSTRACT: The optical density of GaS and GaSe monocrystals was measured as a function of wavelength in the interval  $\lambda = 400-750$  m $\mu$  at temperatures between 280 and 580K. The resistivity of p-type GaS and p-type GaSe samples, obtained by a method of slow cooling at a constant temperature gradient, was  $10^{10}$  and 20 ohm $\cdot$ cm, respectively. The width of the forbidden band determined from the absorption edge at room temperature was found to be 2.53 ev for GaS and 1.97 ev for GaSe. The temperature coefficients of the forbidden band width for GaS and GaSe were  $-7.2 \times 10^{-4}$  and  $-8 \times 10^{-4}$  ev/deg, respectively. Orig. art. has: 2 figures.

~~Card 172~~ Inst. Physics AN AZSSR Baku

L 22717-65 EWT(1)/EWT(m)/EWG(m)/T/EWP(t)/EEC(b)-2/EWP(b) Pub/Pi-l DIAAP/

LJP(c) RUW/JD/JG/CG

ACCESSION NR: AP5013431

UR/0233/65/000/001/0063/0065

AUTHOR: Guseynova, E. S.; Mekhtiyev, R. F.

TITLE: X-ray and Gamma conductivity of GaSe single crystals

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tehnicheskikh i matematicheskikh nauk, no. 1, 63-65

TOPIC TAGS: gallium selenide, single crystal, x ray conductivity, Gamma conductivity, light sensitivity

ABSTRACT: The article reports results of an investigation of the increased conductivity induced by x-rays and gamma rays in low-resistivity (100--200 ohm-cm) and high-resistivity ( $10^4$  ohm-cm) p-GaSe single crystals. The samples were made by a procedure described earlier (DAN AzerbSSR v. 18, 11, 1962; Priboiy i tekhnika eksperimenta No. 2, 1964) and were in the form of parallelepipeds measuring 3--5 x 2--4 x 0.1--0.4 mm. All measurements were made at room temperature. The x-rays were produced by a standard URS-70 apparatus with iron tube, and the gamma rays were from a  $\text{Co}^{60}$  source. For both types of radiation the increase in conductivity was 8--10 times for high-resistivity samples and several multiples of 10% for low-

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L 52717-65

ACCESSION NR: AP5013431

resistivity samples. The results also show that the effect of visible light is not additive with the effects of the x-rays or gamma rays. The reason for this is the presence of two different relaxation mechanisms for the x-ray or gamma ray conductivity, each responding differently to visible light. The results are compared with data by others and some of the differences explained. "Student G.S. Vartanetyan of the Tbilisi State University participated in the measurements. The authors thank Professor G. B. Abdullayev for useful advice and for discussion of the results." Orig. art. has: 3 figures. [02]

ASSOCIATION: none

SUBMITTED: 120ct64

ENCL: 00

SUB CODE: SS, OP

NO REF SOV: 007

OTHER: 001

ATD PRESS: 4012

LL  
Card 2/2



AKHUNDOV, G.I.; ABDULLAYEV, G. .; GURBAYOV, T.D.; AKHMETIYEV, R.F.; ALIYEVA,  
M.K.; GUSEYNOVA, E.S.; HASANOVA, I.A.

AlIII<sub>1-x</sub>BV<sub>x</sub> semiconductors. Izv. AN Azerb.SSR.Ser.fiz.-tekh.i mat. nauk  
no.3:107-114 '64. (MIRA 17:12)

150-65 ENT(1)/TWS(k)/ENT(m)/T/EMP(t)/EMP(b)/TNA(h) Pz-6/Peo IJP(c)/  
SD(t)/SSD/AFWL/AS(rp)-2 RUM/AT/TE/JG  
ACCESSION NR: AP4046258 S/0233/64/000/003/0107/0114

AUTHOR: Akhundov, T. A.; Abdullayev, G. B.; Guseynov, G. D.; Mekhtiyev, R. F.; Aliyeva, M. Kh.; Guseynova, E. S.; Gasanov, I. A.

TITLE: A<sup>III</sup>B<sup>VI</sup> semiconductors

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk, no. 3, 1964, 107-114

TOPIC TAGS: semiconductor single crystal, gallium chalcogenide, indium selenide, thallium selenide, electrical property, photo electric property, optical property

ABSTRACT: Electrical, photoelectric, and optical properties of the following A<sup>III</sup>B<sup>VI</sup> semiconductor single crystals have been investigated: gallium sulfide, selenide, and telluride; indium selenide; and thallium selenide. Several useful properties were previously detected in these semiconductors. The temperature dependence of electrical conductivity, Hall constant, Hall mobility, and thermal emf were determined experimentally in p- and n- type TlSe single crystals grown by horizontal or vertical zone melting. The discrepancy between the experimental

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ACCESSION NR: AP4046258

and theoretical value of the coefficient of thermal emf at low temperatures (below 160K) was explained as a phonon drag effect. The experimental temperature dependence of the phonon component of the thermal emf was found to be in good agreement with that calculated on the basis of the theory of the phonon drag effect in semiconductors of tetragonal symmetry. The basic electronic parameters of TlSe were calculated from experimental data. The spectral distribution of photoconductivity and fundamental optical absorption were determined at 300K in all five  $AlIIBVI$  crystals. Lux-ampere characteristics of intrinsic photoconductivity and its "slow" and "fast" components, as well as the temperature dependence of the "slow" photoconductivity decay, were determined in GaSe and TlSe crystals. The parameters of trapping levels for electrons and holes were calculated for both crystals. Considerable photosensitivity was detected in GaSe crystals in the region of extrinsic absorption (below  $3\mu$ ), owing to the presence of three impurity levels. High-level photosensitivity was detected in both low-ohmic and high-ohmic samples of InSe. Light emission in the yellow and red ranges was observed in GaS, GaSe, InSe, and GaTe single crystals excited with electrons at room temperature. The

Card 2/3

15150-65

ACCESSION NR: AP4046258

crystals were grown from a melt by the slow-cooling method. Orig. art.  
has: 8 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: 65

NO REF SOV: 007

OTHER: 003

Card 3/3

TAGIYEV, M.B.; GUSEYNOVA, E.S. (Baku)

Development of the clothing industry in Azerbaijan during the  
years of Soviet regime. Shvein. prom. no.3:14-16 My-Je '64.  
(MIRA 17:9)

DADASHEV, F. I.; GUSEYNOVA, G.M.

Change in the hydrocarbon composition of gas in the cross-section  
of the producing formation of the Apsheron Peninsula. Azerb. neft.  
khoz. 39 no.6:3-5 Je '60. (MIRA 13:10)  
(Aspheron Peninsula--Gas, Natural--Analysis)  
(Hydrocarbons)

TUSKIYA, B.A.; GUSEYNOVA, G.M.

Distribution of petroleum boundaries of the field on Artem  
Island (northern fold). Azerb. neft. khoz. 41 no.9:13-15  
S '62. (MIRA 16:6)  
(Artem Island--Petroleum geology)

GUSEYNOVA, Kh.G.

Material on diphtheria in Baku. Report No.2: Azerb.med.zhur.  
no.2:73-76 F '58 (MIRA 11:12)

1. Iz kafedry epidemiologii, mikrobiologii i gigiyeny (zav. kafedroy  
-prof. M.I. Iur'ye) Azerbaydzhanskogo instituta usovershenstvovaniya  
vrachey (direktor - M.I. Aliyev).  
(BAKU--DIPHTHERIA)



GUSEYNOVA, Kh.G.

Material on characteristics of diphtheria in Baku. Report No.3.  
Azerb.med.zhur. no.4:67-69 Ap '58 (MIRA 11:7)

1. Iz kafedry epidemiologii, mikrobiologii i gigiyeny (zav. -  
prof. M.I. Lur'ye) Azerbaydzhanskogo gosudarstvennogo instituta  
usovershenstvovaniya vrachey (direktor - M.I. Aliyev).  
(BAKU--DIPHTHERIA)

GUSEYNOVA, Kh. G. Cand Med Sci -- (diss) "Data ~~on~~ the characteristics of diphtheria in the city of Baku (Bacteriology, epidemiology, and certain problems of immunity)." Baku, 1959. 17 pp (Azerbaijani State Med Inst im N. Narimanov), 200 copies (KL, 50-59, 129)

GUSEYNOVA, Kh.G.

Data on the characteristic features of diphtheria in Baku.  
Azerb.med.zhur. no.8:51-54 Ag '59. (MIRA 12:11)  
(BAKU--DIPHTHERIA)

GUSEYNOV, A.M.; GUSEYNOVA, L.A.

Accretion in the woody plants of the forests of Azerbaijan. Bot. zhur.  
48 no.10:1533-1537 0 '63. (MIRA 17:1)

1. Azerbaidzhanskiy nauchno-issledovatel'skiy institut lesnogo kho-  
zyaystva i agrolesomeioratsii.

GUSEYNOV, M.M., professor; STEPANYAN, A.M., kandidat meditsinskikh nauk;  
GUSEYNOVA, L.I., ordinator; MIRSOYEVA, M.G., ordinator

Clinical aspects of lichen ruber planus. Vest.ven. i derm. no.3:  
48-49 My-Je '56. (MLRA 9:9)

1. Iz kafedry kozhnykh i venericheskikh bolezney (sav. - prof.  
N.N.Guseynov) Azerbaydzhanskogo gosudarstvennogo instituta usover-  
shenstvovaniya vrachey.

(LICHEN PLANUS  
ruber (Bus))

GUSEYNOV, M.M.; STEPANYAN, A.M.; GUSEYNOVA, L.I.; MIRZOYEVA, M.P.

Treating lichen ruber planus with penicillin. Vest.dern. i ven.  
31 no.4:54-55 J1-Ag '57. (MIRA 10:11)

1. Iz kafedry kozhnykh i venericheskikh bolezney Azerbaydzhanskogo  
gosudarstvennogo instituta usovershenstvovaniya vrachey.  
(LICHEN RUBER) (PENICILLIN)

GUSEYNOVA, L.M.

Change of vitamin C and pyruvic acid in acute bacillary dysentery  
in children. Azerb. med. zhur. no. 8:44-51 Ag '60.

(MIRA 13:8)

1. Iz kafedry gospiatal'noy pediatrii (zav. - zasl. deyatel'  
nauki, dotsent A.N. Amirdzhanov) i kafedry gospiatal'noy  
terapii (zav. - chlen-korrespondent AN Azerbaydzhanskoy SSR  
zasl. deyatel nauki, prof. D.M. Abdullayev) Azerbaydzhanskogo  
gosudarstvennogo meditsinskogo instituta im. N. Narimanova  
(direktor - zasl. deyatel' nauk, prof. B.A. Eybazov).  
(ASCORBIC ACID) (PYRUVIC ACID) (DYSENTERY)

GUSEYNOVA, L. N.

Cand Med Sci - (diss) "Several biochemical changes in bacterial dysentery in children." Tbilisi, 1961. 18 pp; (Tbilisi State Med Inst); 300 copies; free; (KL, 7-61 sup, 258)



GUSEYNOVA, L.M.

Changes of vitamin B<sub>1</sub> in bacterial dysentery in children.  
Azerb. med. zhur. 41 no.3:55-58 Mr '64. (MIRA 17:10)

AMIRDZHANOV, A.N.; GUSEYNOVA, I.M.

Effectiveness of cortisone and its influence on the electrolyte  
content of the blood in bacterial dysentery in children. Azerb.  
med. zhur. 41 no.5:65-72 My '64.

(MIRA 18:10)

GUSEYNOVA, L.M.

Mineral metabolism in pneumonia in children treated with  
hormonal preparations. Azerb. med. zhur. 41 no.8:41-46  
Ag '64. (MIRA 18:11)

GASANOV, Sh.M., prof. zasluzhenny deyatel' nauki; IMANOV, S.Kh.;  
GUSEYNOVA, L.R.; KYAMIL', E.M.; MELIK-ABBASOVA, F.A.; MIRZOYFV, G.

Effectiveness of treating hypertension at the Mardakyar  
Specialized Neurosomatic Sanatorium. Sbor. trud. Azerb.  
nauch.-issl. inst. kur. i fiz. metod. lech. no.9:42-48 '63.  
(MIRA 18:8)

GUSEYNOVA, L.Sh.; GUTYRYA, V.S.

Effect of aromatic hydrocarbons in Baku petroleum on catalytic  
cracking indices of distillates from this petroleum. Sbor.trud.  
Az NII NP no.4:54-68 '59. (MIRA 15:5)  
(Cracking process)





SHIKHIYEV, I.A.; ALIYEV, M.I.; SADYKHZADE, S.I.; SHCHEGOL', Sh.S.;  
AKHUNDOVA, G.Yu.; KRASNOKUTSKIY, V.P.; GUSEYNOVA, M.A.;  
MUKHARAMOVA, Kh.F.; KURBANALIYEVA, T.Kh.; NIKOLAYEVA, L.

Synthesis and use of silicon naphthenic acids in the production  
of butadiene-styrene rubber. Azerb.khim.zhur. no.5:65-68  
'61. (MIRA 15:5)

(Naphthenic acids) (Silicon organic compounds)  
(Rubber, Synthetic)



GUSEYNOVA, N. A. *И*

Guseynova, N. A. *И*

"Sweet and sour milk mixtures in the diet of ill and healthy nursing children." Acad Med Sci USSR. Moscow, 1955. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 25, 1956

SERGEYEV, L.A.; SHAPIROVSKIY, N.I. [deceased]; BABAYEV, D.Kh.; GANBAROV, Yu.G.;  
AKHUNDOV, I.D.; TAGIYEV, Z.B.; TAGIYEV, A.I.; ISMAYLOVA, R.I.;  
UMANOVA, V.A.; GUSEYNOVA, N.N.; ALIZADE, Kh.A.; CHURLIN, V.V.;  
TOROPOVA, K.M.

First results of the use of the seismic method for the direct  
prospecting of oil and gas pools in the sea. Dokl. AN Azerb.  
SSR 20 no.9:27-31 '64. (MIRA 18:1)

1. Institut geologii i razrabotki goryuchkikh iskopayemykh  
AN SSSR i Azerbaydzhanskiy nauchno-issledovatel'skiy institut  
po dobyche nefi.

ABDULLAYEV, I.M.; GUSENKOVA, I.M.

Chemical composition of leaves in recently developed mulberry  
varieties. Dokl. AN Azerb. SSR 17 no. 4:723-726 '61.  
(WIPA 14:10)

1. Institut genetiki i selektsii AN AzerbSSR.  
(Azerbaijan--Mulberry--Varieties)

ABDULLAYEV, I.K.; GUSEYNOVA, P.A.

Chemical composition of the leaf of artificially obtained  
tetraploid forms of the mulberry. Dokl. AN Azerb. SSR 18  
no.11:53-56 '62. (MIRA 17:2)

1. Institut genetiki i selektsii AN AzerSSR.

ABDULLAYEV, M.D.; GUSEYNOVA, R.A.

Effect of petroleum growth-promoting substance (NRV) on  
Brown-Pearce carcinoma and on the metastasis process in rabbits.  
Dokl. AN Azerb. SSR 18 no.7:59-63 '62. (MIRA 17:2)

1. Institut rentgenologii i radiologii AN AzSSR i Institut  
eksperimental'noy i klinicheskoy meditsiny. Predstavleno akademikom  
AN AzSSR M.A. Topchibashevym.

GUSEYNOVA, R.A.; ABDULLAYEV, M.D.

Antiblastic action of the petroleum growth substance (NRV).  
Dokl. AN Azerb. SSR 18 no.11:75-79 '62. (MIRA 17:2)

1. Predstavleno akademikom AN AzSSR A.I. Karayevym.

ABDULLAYEV, M.B.; GUSEYNOVA, R.A. (Baku, ul. Bakhmurova, d.6, kv.2)

Effect of a growth promoting substance of petroleum origin on  
tumor growth under experimental conditions. Vop. onk. 10 no.1:  
21-25 '64. (MIRA 17:11)

1. Iz Nauchno-issledovatel'skogo instituta rentgenologii i radio-  
logii (dir. - prof. M.M. Alikishibekov) i otdela patomorfologii  
(rukovoditel' - chlen-korrespondent AN AzerbSSR prof. D.Yu. Gu-  
seynov) Instituta eksperimental'noy i klinicheskoy meditsiny AMN  
SSSR v gorode Baku (dir. - chlen-korrespondent AN AzerbSSR prof.  
F.A. Efendiyev).

GASANOV, F.G.; GUSEYNOVA, R.A.; NIALIMOVA, R.M.

Investigating the effect of separate factors on the displacement of the water-oil contact and the flooding of oil reservoirs using the EM-8 model. Izv. AN Azerb. SSR. Ser.fiz.-tekh. i mat. nauk no.1:89-94 '65. (MIRA 18:6)



2752  
S/194/62/000/003/039/066  
D201/D301

24.7700

AUTHORS:

Aliyev, M. I., Guseynova, R. F. and Akhundova, S. A.

TITLE:

Electrical properties of selenium containing thallium

PERIODICAL:

Referativnyy zhurnal, Avtomatika i radioelektronika,  
no. 3, 1962, abstract 3-4-9shch (Uch. zap. Azerb. un-t,  
Ser. fiz. matem. i khim. n., 1960, no. 1, 51-57)

TEXT: The effect of various Tl contents on the electrical conductivity  $\sigma$  of polycrystalline hexagonal selenium was investigated. Measurements of  $\sigma$  were carried out between 25 and 260°C on selenium samples containing  $10^{-6}$  - 1.5% by weight of Tl. A table of various values of  $\sigma$  for several temperatures and concentrations of Tl is given. The semiconductor character of  $\sigma$  temperature dependence was observed in samples with 0.0125 - 1.5% of Tl concentration. A minimum of  $\sigma$  at all temperatures was observed for concentrations of Tl 0.05 - 0.1%. The samples with low Tl content ( $10^{-4}$  -  $10^{-6}\%$ ) exhibited a metal-type of conductivity where the temperature was in-

Card 1/2

TEODOROVICH, I.L.; GUSEYNOVA, R.Kh.

Conditions for obtaining precipitates of ferrocyanides  $\text{Fe}^3$ ,  $\text{Cu}^3$ ,  
and  $\text{Sn}^4$  of a constant composition. Soob.o nauch.rab.chl.VKHO  
no.1:22-25 '55.

(Ferrocyanides)

(MIRA 10:10)

BYKOV, V.D.; GUSEYNOVA, S.I.

Effect of acupuncture on the bioelectric activity of the  
brain in practically healthy people. Sbor. trud. GMI no.9:  
36-42 '62. (MIRA 17:2)

1. Dotsentskiy kurs igloukalyvaniya (zav. - dotsent M.K.  
Usova) i kafedra klinicheskoy i eksperimental'noy fiziologii  
(zav. - dotsent Ye.F. Poleshayev) TSentral'nogo instituta  
usovershenstvovaniya vrachey (dir. - M.D. Kovrigina).

GUSEYNOVA, S.K.

Varieties of wheat of the species *Triticum turgidum* L. Dokl.  
AN Azerb. SSR 19 no.10:89-92 '63. (MIRA 17:6)

1. Prodstavleno akademikom AN Azerbaydzhanskoy SSR I.D.  
Mustafayevym.

GUSEYNOVA, S.K.

Hybridization of the wheat *Triticum turgidum* L. with cultivated  
and wild einkorn and emmer. Dokl. AN Azerb. SSR 20 no.12:  
41-44 '64. (MIRA 18:4)

1. Azerbaydzhanskiy gosudarstvennyy universitet.

GUSEYNOVA, S. Yu.

Dynamics of the protective cellular reaction in active immunization against gas gangrene caused by *Cl. perfringens*. Report No.1: Study of the dynamics of the cellular reaction of the body and changes in the histochemical indices in nonimmunized animals induced by *Cl. perfringens*. Zhur.mikrobiol.epid.i immun. 32 no.1:55-60 Ja '61.  
(MIRA 14:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(GANGRENE)

GUSEYNOVA, S. Yu.

Dynamics of the protective cellular reaction in active immunization against gas gangrene caused by Cl.perfringens. Report No.2: Study of the cellular reaction of the body and changes in the histochemical indices in immunized animals with subsequent infection of Cl.perfringens. Zhur. mikrobiol. epid. i immun. 32 no.6:98-104 Je '61. (MIRA 15:5)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.  
(GAS GANGRENE) (IMMUNITY) (CLOSTRIDIUM PERFRINGENS)

GUSEYNOVA, S. Yu.

Study of change in the phagocytic activity of leukocytes in the blood of immunized and nonimmunized guinea pigs infected with *Cl.perfringens*. Zhur. mikrobiol., epid. i immun. 32 no.8:112-116 Ag '61. (MIRA 15:7)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(CLOSTRIDIUM PERFRINGENS) (PHAGOCYTOSIS)



AKHMEDOV, A.A., dotsent; GUSEYNOVA, T.G., assistant

Bibliographical index on stomatology in Azerbaijan for the  
period 1908-1963. Azerb. med. zhur. 42 no.4:75-79 Ap '65.  
(MIRA 16:9)

AKHMEDOV, A.A., dotsent; GUSEYNOVA, T.G., assistant

Bibliographic index of stomatological works published in Azerbaijan  
during the period from 1908 to 1963. Azerb. med. zhur. 42 no.6:81-  
84 Je '65. (MIRA 18:9)

GUSEYNOVA, Ya.A.

Significance of the control of the rhesus conflict in the  
antenatal protection of the fetus. Azerb. med. zhur. 42  
no.3:51-54 Mr '65. (MIRA 18:6)

ZUL'FUGAROV, Z.G.; MURADOVA, S.A.; GUSEYNOVA, Z.A.

Manufacture of vitreous magnesium silicate catalysts for the  
cracking of heavy petroleum fractions [in Azerbaijani with summary  
in Russian]. Izv. AN Azerb. SSR. Ser. fiz.-tekhn. i khim. nauk no.1:  
113-124 '59. (MIRA 12:6)

(Cracking process) (Magnesium silicates) (Catalysts)

3/121/60/000/018/002/009  
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 9, p. 65, # 72595

AUTHORS: Guseynova, Z. A., Topchiyeva, K. V., Zul'fugarov, Z. G.

TITLE: The Effect of Activating Cations on the Porosity of the Structure  
and Activity of Metal-Silicate Catalysts

PERIODICAL: Azerb. khim. zh., 1959, No. 6, pp. 47-55 (Azerb., Russian summary)

TEXT: On the example of Mn-, Zn-, Cu-, and Sr-silicate catalysts it is shown that more active contacts with larger specific surfaces are obtained when the indicated cations of basic metal-silicate compounds are partially substituted by cations of activating Al salts. The introduction of a Mg activator cation into the composition of the catalyst causes a widening of the pore diameter. Then the activity changes only slightly. Benzines formed on the catalysts activated with an Al cation, are more aromatized and contain less non-saturated hydrocarbons than benzines formed on initial catalysts and on catalysts activated with Mg cations.

From the author's summary.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

ZUL'FUGAROV, Z.G.; GUSEYNOVA, Z.A.; ALIMARDANOV, G.I.

Activity of oxide catalysts in the conversion of gas condensate  
to unsaturated hydrocarbons. Azerb.khim.zhur. no.4:75-82  
'60. (MIRA 14:6)

(Olefins) (Catalysts)

GUSEYNOVA, Z.A.; TOPCHIEVA, K.V.; ZULFUGAROV, Z.I.

Effect of activating cations on the porosity and activity of  
metallo-silicate catalysts [in Azerbaijani with summary in  
Russian]. Azerb.khim.zhur. no.6:47-55 '59. (MIRA 14:9)  
(Catalysts) (Cations)

GUSEYNOVA, Z.A.; ZUL'FUGAROV, Z.G.

Relationship between the activity and porous structure of  
magnesium silicate and aliminomagnesium silicate catalysts  
[in Azerbaijani with summary in Russian]. Azerb. khim. zhur.  
no.3:71-82 '61. (MIRA 14:11)

(Catalysts)



S/064/62/000/002/001/008  
B105/B101

AUTHORS: Dalin, M. A., Guseynova, Z. D., Savel'yev, Yu. V., Taniyants, K. D., Burmistrova, R. S., Belen'kaya, Ye. L.

TITLE: Production of high-purity ethylene

PERIODICAL: Khimicheskaya promyshlennost', no. 2, 1962, 1 - 3

TEXT: Special purification methods of pyrogas for the production of high-purity ethylene are described. The study was conducted in an experimental plant with a productivity of 800 Nm<sup>3</sup>/h as follows: (1) Purification of the gas from sulfur compounds and carbon dioxide by means of 11.6% NaOH. The pyrogas is previously cooled to 15 - 18°C to eliminate polymerizable hydrocarbons, and purification is performed at a watering density of 7 m<sup>3</sup>/m<sup>2</sup>·h, a linear pyrogas velocity of 0.04 m/s, and a temperature of ~50°C. (2) Dehydration of the gas in two stages: from an initial pyrogas moisture of 225 mg/Nm<sup>3</sup> to 20 mg/Nm<sup>3</sup>, as well as from 20 to 10 mg/Nm<sup>3</sup>. Silica gel of the following specification was tested: volume weight 0.85 g/cm<sup>3</sup>; specific pore volume 0.320 cm<sup>3</sup>/g; specific surface 537 m<sup>2</sup>/g; average pore radius 11.8 Å. Dehydration of air and

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S/064/62/000/002/001/008  
B105/B101

Production of high-purity...

ethylene was performed under laboratory conditions by means of molecular sieve of the NaA type produced at the GrozNII, the Gor'kovskaya opytaya baza VNIIMP (Gor'kiy Experimental Base VNIIMP), and the Institut fizicheskoy khimii AN USSR (Institute of Physical Chemistry AS UkrSSR). The volume weight of the molecular sieve varies between 0.45 and 0.7 g/cm<sup>3</sup>. (3) The purification of the ethylene-ethane fraction from acetylene may be realized by selective hydrogenation in the presence of catalysts, or (for more than 0.5% C<sub>2</sub>H<sub>2</sub>) by absorption with organic

solvents. An industrial nickel-chrome catalyst was tested in an experimental plant. The ethylene-ethane fraction with a content of 0.025 to 0.19% acetylene was hydrogenated by the methane-hydrogen fraction of the pyrogas at 150 - 190°C, 23 - 25 atm, 4000 - 6000 h<sup>-1</sup> volume velocity, and a hydrogen concentration of 25 - 30% in the methane-hydrogen fraction. (4) Methane removal of the ethylene-ethane fraction by fractional distillation at -23 to -32°C. The methane and carbon monoxide content in ethylene after methane removal was determined by the xT-2M (KhT-2M) chromatograph. Activated carbon of the type AP-3 (AR-3) was used as adsorbent. There are 4 figures, 2 tables, and 7 references: 1 Soviet and 6 non-Soviet. The four most recent references to English-language

Card 2/3

Production of high-purity...

S/064/62/000/002/001/008  
B105/B101

publications read as follows: W. H. Stanton, Petr. Refiner no. 5, 1959, 177; R. E. Reitmeier, H. W. Fleming, Chem. Eng. Progress 54, no. 12, 1958, 48. U. S. Catalysts and Chem Inc., Louisville, Kentucky, 1958.

Card 3/3

DAVIN, M.A.; BERCO, B.G.; GERSH, V.S.; MARKOSOV, P.I.; MONED, Ya.D.;  
Prinimali uchastiiye: GUSEYNOVA, Z.D.; TANIYANTS, K.G.;  
SARKISYANTS, G.I.; TURVSKIY, Ye.N.; NEMCHIK, L.G.

Low temperature rectification of pyrolysis gas on a sectional  
column. Khim. prom. 40 no.10:785-790 O '64.

(MIRA 18:3)

BAKHSHEZADE, A.A.; GUSEYNOVA, Z.D.; TANIYANTS, K.D.; BELEN'KAYA, Ye.L.

Production of high-purity propylene. Azerb. khim. zhur. no. 2:  
24-30 '65. (MIRA 18:12)

1. VNIIOlefin.

S/081/61/000/010/002/029  
B117/B207

AUTHORS: Zulfugarov, Z. H., Husejnova, Z. E., Elimerdanov, H. I.

TITLE: Study of the activity of oxide catalysts in the transformation reaction from gas condensate into unsaturated hydrocarbons

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1961, 71, abstract 10B512 (10B512). ("Azerb. khim. zh.", no. 4, 1960, 75-82)

TEXT: A method was studied for producing active oxide catalysts to transform the broad and the small ( $70^{\circ}$ - $140^{\circ}$ C) fraction of the gas condensate into gaseous unsaturated hydrocarbons. The activities of Mn-, Zn-, Cu silicate and Mg metal silicate, as well as Mn-, Zn-, and Cu aluminosilicate catalysts were shown to be inconsiderable and of the same order of magnitude. The activity of molybdenum catalysts prepared on the basis of  $(\text{HAlSiO}_4)_x$  hydrogels is 40-46% lower than that of the same molybdenum catalysts prepared on  $(\text{Na(K)AlSiO}_4)_x$  hydrogel basis. A profounder sub-

Card 1/2

Study of the activity of oxide...

S/081/61/000/010/002/029  
B117/B207

stitution of hydrogen ions in the aluminosilicate composition by K(Na) ions contributes to a certain increase in the yield of unsaturated hydrocarbons. The Mo-, K(Na) aluminosilicates are the most active catalysts. This type of catalyst secures a yield of unsaturated hydrocarbons amounting to 29% by weight of the initial substance, among them 11.3% ethylene, 15.9% propylene, and 1.8% butylene. [Abstracter's note: Complete translation.]

Card 2/2

ALTYEV, P.K.; SARAFOV, K.M.; RAKHIMOVA, A.E.; GUSLIZOVA, N.B.

Characteristics of the chemical composition and phytonoides:  
property of various parts of the onion *Allium sativum*  
growing in Azerbaijan. Vop. fiziol. 6:91-103 '63.

(MIRA 17:11)



GUSEYNOVA, M.M., assistant

Study of the chemical composition of the leaves of the elders *Sambucus*  
*ebulus* and *S. nigra* from the Azerbaijan flora and the experimental pur-  
gative effect of different types of drugs and preparations derived from  
them. Azerb. med. zhur. 42 no.6:29-35 Je '65. (MIRA 18:9)

1. Iz kafedry tekhnologii lekarstvennykh form i galenovo-farmatsevti-  
cheskikh preparatov (zaveduyushchiy - prof. R.K.Aliyev) Azerbayzhan-  
skogo gosudarstvennogo meditsinskogo instituta im. N.Narimanova.

GUSEYNZADE, Ali

Manuscripts of the "History of Karabag" by Mir Mekhti Hasani.  
Dokl. AN Azerb. SSR 16 no.2:201-205 '60. (MIRA 13:8)  
(Hasani, Mir Mekhti)

S/079/62/032/005/006/009  
D204/D307

AUTHORS: Shikhiyev, I.A., Aliyev, M.I., and Guseynzade, B.Kh.

TITLE: Studies of the syntheses and transformation of oxygen-containing organosilicon compounds. XI. Synthesis of symmetrical organosilicon trichloroacetals

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 5, 1962, 1646-1647

TEXT:  $\text{CCl}_3\text{CH}(\text{OSiMe}_3)_2$  (I) was prepared in 18.1 % yield from chloral hydrate (0.22 moles) and  $\text{Me}_3\text{SiCl}$  (0.4 moles), in ether/ $\text{Et}_3\text{N}$ , at room temperature, over 1 hr.  $\text{CCl}_3\text{CH} / \text{OSiEt}_3 / 2$  (II) was synthesized by an analogous reaction between chloral hydrate and  $\text{Et}_3\text{SiCl}$ ;  $\text{Et}_3\text{SiOSiEt}_3$  and  $\text{Et}_3\text{SiOCHOCHOSiEt}_3$  (III) were also present in the reaction mixture.

The structure of II was demonstrated by synthesizing it, in 17.4 % yield, from chloral hydrate (0.1 mole), which had been refluxed with dry benzene separating the water formed, and  
Card 1/2

Studies of the syntheses and ...

S/079,62/032/005/006/009  
D204/D307

$\text{Et}_3\text{SiOH}$  (0.03 moles), in presence of  $\text{HCl}$  (33 %, 2 drops), on heating to  $80 - 82^\circ\text{C}$ . The mixture was then allowed to stand overnight, was treated with 1 drop of  $\text{HCl}$ , heated for a further 2 hrs., neutralized with  $\text{KOH}$  and distilled under vacuum. A number of acetylenic organosilicon acetals was prepared by the latter method, whose properties shall be described in future publications. Compound II decomposed into  $\text{Et}_3\text{SiOSiEt}_3$  and III on repeated distillation. Compounds I, II and III are new.

ASSOCIATION: Institut neftekhimicheskikh protsessov Akademii nauk Azerbaydzhanskoy SSR (Institute of Petro-Chemical Processes of the Academy of Sciences of the Azerbaydzhans SSR)

SUBMITTED: May 3, 1961

Card 2/2

S/081/62/000/016/011/043  
B168/B186

AUTHORS: Shikhiyev, I. A., Aliyev, M. I., Guseyn-Zade, B. Kh.,  
Karayeva, Sh. V.

TITLE: Synthesis of acetylene alcohols containing  $\gamma$ -silicohydride  
and their dehydrocondensation by dimethylphenylsilanol

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 16, 1962, 235, abstract  
16Zh271 (Azerb. khim. zh., no. 3, 1961, 67-70 [summary in  
Azerb.] )

TEXT: Production of  $RR'C(OH)C \equiv CSiHR_2$  (I, where  $R = CH_3, C_2H_5$ ;  
 $R' = CH_3, C_2H_5, \text{tert-}C_4H_9$ ;  $R'' = CH_3, C_2H_5$ ) by the reaction of

$RR'C(OMgBr)C \equiv CMgBr$  with  $R_2''SiHCl$  (II) is described. The reaction of I  
with  $C_6H_5(CH_3)_2SiOH$  (III) produces  $RR'C(OH)C \equiv CSi(R_2'')OSi(CH_3)_2C_6H_5$  (IV)  
with liberation of  $H_2$ . The presence of an OH group in I is proved by  
acetalization and by the fact that the corresponding siloxy derivatives are

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Synthesis of acetylene alcohols...

S/081/62/000/016/011/043  
B168/B186

produced in accordance with the formula:  $I + CH_2 = CHOC_4H_9$  (V)  
 $\rightarrow CH_3CH(OC_4H_9)OC(RR')C \sim CSiHR_2''$  (VI). 0.2 mole II ( $R_2'' = CH_3$  and  $C_2H_5$ )  
 is gradually added, during cooling, to Iotsich's reagent (consisting of  
 0.4 mole  $C_2H_5Br$ , 0.4 mole Mg and 0.2 mole methyl-tert-butylacetylenyl-  
 carbinol); after 12 hr this mixture is heated for 6 hr, after 4 hr ( $20^\circ C$ )  
 it is decomposed with dilute HCl and I ( $R = CH_3$ ,  $R' = tert-C_4H_9$ ,  
 $R_2'' = CH_3$  and  $C_2H_5$ ) (Ia) (here and henceforth yield in %, boiling point in  
 $^\circ C/mm$ ,  $n_D^{20}$ ,  $d_4^{20}$  will be given for isolated substances), 26.3, 69/2,  
 1.4603, 0.8768, is isolated from the ester layer. 0.01 g  $ZnCl_2$  is added to  
 a mixture of 0.05 mole Ia and 0.05 mole III in  $C_6H_6$ ; when evolution of  $H_2$   
 has ceased the  $C_6H_6$  is driven off and IV ( $R = CH_3$ ,  $R' = tert-C_4H_9$ ,  
 $R_2'' = CH_3$  and  $C_2H_5$ ), 21.55, 106/0.18, 1.5124, 0.9842, is isolated from the  
 residue. 0.2 ml 33 % HCl is added to a mixture of 0.03 mole I  
 ( $R = R' = CH_3$ ,  $R_2'' = CH_3$  and  $C_2H_5$ ) and 0.03 mole V; this is heated for

Card 2/3

Synthesis of acetylene alcohols...

S/081/62/000/016/011/043  
B168/B186

30 min at 70°C and neutralized after 12 hr with calcined  $K_2CO_3$ , and VI  
( $R = R' = CH_3$ ,  $R_2'' = CH_3$ ,  $C_2H_5$ ), 26.04, 119/4, 1.4422, 0.8725, is  
isolated from it. Other representatives of this class of compound are  
produced in a similar manner. [Abstracter's note: Complete translation.]

Card 3/3

L 06492-67 EWP(j)/EWT(m) RM

ACC NR: AP6028574

SOURCE CODE: UR/0316/66/000/003/0041/0045

AUTHOR: Shikhiyev, I. A.; Rzayeva, S. A.; Guseynzade, B. M.

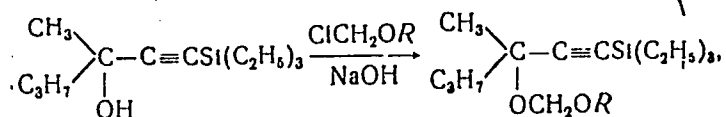
ORG: INKhP AN AzerbSSR

TITLE: Synthesis and conversions of branched organosilicon acetylenic alcohols

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 3, 1966, 41-45

TOPIC TAGS: organosilicon compound, acetylene compound, alcohol

ABSTRACT: The conditions of synthesis of certain branched organosilicon acetylenic alcohols and their reactivity toward  $\alpha$ -chloromethyl alkyl ethers were studied on the reaction



where R = CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, n-C<sub>3</sub>H<sub>7</sub>, n-C<sub>4</sub>H<sub>9</sub> and n-C<sub>5</sub>H<sub>11</sub>. The studies showed that the branched  $\gamma$ -silicon-containing acetylenic alcohols in absolute ether in the presence of powdered NaOH react with  $\alpha$ -chloromethyl alkyl ethers to form the corresponding organosilicon acetylenic formals. The experimental procedure employed is illustrated with the synthesis of 1-triethylsilyl-3-methyl-1-hexyn-3-ol (for the alcohols) and methyl(-1-tri-

Card 1/2



L 06492-67

ACC NR: AP6028574

ethylsilyl-3-methyl-1-hexyne) formal (for the formal). The physicochemical constants of the synthesized compounds are tabulated. Orig. art. has: 1 table.

SUB CODE: 07/ SUBM DATE: 15Jan65/ ORIG REF: 006

Card 2/2 m/e

ACCESSION NR: AP4018053

S/0079/64/034/002/0394/0396

AUTHOR: Shikhiyev, I. A.; Guseynzade, B. M.; Mekhmandarova, N. T.; Aslanov, I. A.

TITLE: Research in the area of synthesis and conversion of unsaturated silicon germanium organic compounds

17. Synthesis and some conversions of silicon and germanium organic alcohols of the diacetylene series

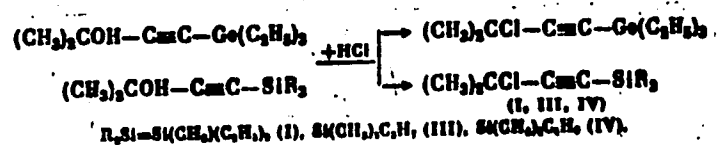
SOURCE: Zhurnal obshchey khimii, v. 34, no. 2, 1964, 394-396

TOPIC TAGS: silicon germanium, synthesis unsaturated silicon germanium, conversion unsaturated silicon germanium, organic alcohol, diacetylene series organic alcohol

ABSTRACT: The synthesis of silicon and germanium organic acetylene chlorides is studied by means of a reaction of gaseous hydrogen chloride with corresponding acetylene alcohols according to:

Card 1/4

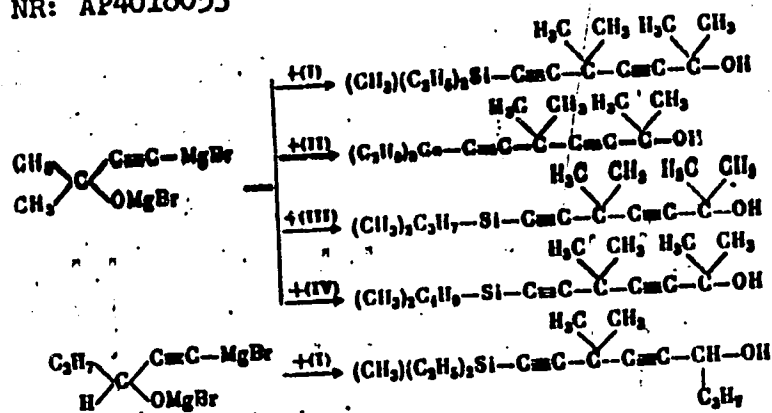
ACCESSION NR: AP4018053



Silicon and germanium organic monoatomic diacetylene alcohols with isolated triple bonds were synthesized by means of the reaction of the corresponding Iotsich reagent of acetylene alcohols with some silicon and germanium organic acetylene chlorides as follows:

Card 2/4

ACCESSION NR: AP4018053



Four representative silicon and germanium organic acetylene tertiary chlorides are described for the first time: 4-methyldiethylsilicon-2-chlor-2-methylbutine-3; 4-triethylgermanium-2-chlor-2-methylbutine-3; 4-dimethylpropylsilicon-2-chlor-2-methylbutine-3; 4-dimethylbutylsilicon-2-chlor-2-methylbutine-3. Five representative silicon and

Card 3/4

ACCESSION NR: AP4018053

germanium organic monoatomic diacetylene alcohols determined for the first time are also described: 9-methyldiacetylsilicon-7,7-dimethyl-nonadiene-5, 8-ol-4; 7-methyldiethylsilicon-2,5,5-trimethylheptadiene-3,6-ol-2; 7-triethylgermanium-2,5,5-trimethylheptadiene-3,6-ol-2; 7-dimethylpropylsilicon-2,5,5-trimethylheptadiene-3,6-ol-2; 7-dimethylbutylsilicon-2,5,5-trimethylheptadiene-3,6-ol-2. The germanium organic diacetylene acetal n.-butyltriethylgermaniumtetramethylhexadiene-acetal is described for the first time. Orig. art. has: 2 tables.

ASSOCIATION: Institut neftekhimicheskikh protsessov Akademii nauk Azerbaydzhanskoy SSR (Institute of Petrochemical Processes, Academy of Sciences Azerbaijan SSR)

SUBMITTED: 19Dec62

DATE ACQ: 19Mar64

ENCL: 00

SUB CODE: CH

NO REF SOV: 003

OTHER: 000

Card 4/4

10.50

S/079/61/031/011/009/015  
D223/0305

53700

AUTHOR: Shikhiyev, I. A., Aliyev, M. I., Garayeva, Sh. V., and Guseynzade, B. M.  
TITLE: Synthesis of branched silicoorganic acetyl alcohols and glycols  
PERIODICAL: Zhurnal obshchey khimii, vol. 31, no. 11, 1961, 3649-3652

TEXT: The authors give the first description of the synthesis of:  
5-trimethylsilyl-3-ethylpentyn-4-ol-3  $\rightarrow$   $\text{MeCH}_2\text{C}(\text{Et})\text{OHC}(\text{CSiMe}_3)$  (I);  
5-trimethylsilyl-2,2,3-trimethylpentyn-4-ol-3  $\rightarrow$   $\text{Me}_3\text{CC}(\text{Me})\text{OHC}(\text{CSiMe}_3)$  (II);  
n-butyltrimethylsilylethylpentyn-4-ol-3  $\rightarrow$   $\text{MeC}(\text{OBu})\text{OHC}(\text{Et}_2)\text{C}(\text{CSiMe}_3)$   
(III); n-butyltrimethylsilyltrimethylpentyn-4-ol-3  $\rightarrow$   
 $\text{MeC}(\text{OBu})\text{OHC}(\text{Me})(\text{CMe}_3)\text{C}(\text{CSiMe}_3)$  (IV); bis-(3-ethylpentyn-1-ol-3)-  
dimethylsilane  $\rightarrow$   $\int \text{MeCH}_2\text{C}(\text{Et})\text{OHC}(\text{C} \backslash \text{SiMe}_2)$  (V); bis-(5-trimethylsilyl-

Card 1/3

10183

S/019/61/031/011/009/015  
D228/D306

# Synthesis of branched...

2,2,3-trimethylpentyn-4-ol-3)-dimethylsilane  $\rightarrow$   $[M_2CC(M)(OH)C_2SiMe_2]$   
(VI); and bis-(3-ethylpentyn-2-oxo-3)-dimethylsilane  $\rightarrow$   $[M_2CC(M)(OCOMe)C_2SiMe_2]$  (VII). Their work is a continuation of

previous research by I. A. Shikhiyev, M. F. Shostakovskiy, N. V. Komarov, M. I. Aliyev, I. A. Aslanov and Sh. V. Garayeva (Ref. 1. Novyye kislородo soderzhashchiye kremneorganicheskiye soedineniya (New Oxygen Containing Silicoorganic Compounds). Baku, 1960; Ref. 2. Zh. obshch. khimii, 30, 2916, 1960), in which it was shown that silicoorganic acetyl alcohols and glycols are formed through the reaction of branched (aryl)chlorosilanes with dimethylacetylcarbinylmagnesium bromide in the presence of a  $CuCl$  and  $HgCl_2$  catalyst. I. A. Shikhiyev, N. V. Komarov and I. A.

Aslanov (Ref. 4. Uspe. Khim. 27, 1504, 1958) also established the structure of these compounds by hydrogenation and acetalization. The method of T. A. Favorskaya and I. A. Favorskaya (Ref. 5. Zh. obshch. khimii, 10, 451, 1940) was used to prepare  $Al$ . This entails the stirring and cooling of a solution of the Grignard reagent and diethyl acetylcarbinol; for  $2$  hr; the addition of trimethylchlorosilane, followed by the heating of

Card 2/5

10.55

S/079/61/031/011/000000  
D228/D305

Synthesis of branched...

the solution and its treatment with dil. HCl; the separation of the ether and water layers; and distilling-off the required alcohol at 69 - 79°. V was obtained by gradually adding dimethyldichlorosilane to a solution of the Grignard reagent and diethylacetylcarbinol, which was first cooled and stirred for 2 hr. The solution was allowed to stand overnight, after which dil. HCl was added, and the ether and water layers were then separated; the desired compound boils over at 128 - 130° during double multiple distillation. II and VI were synthesized by the same procedure adopted for I and V. The authors consider the presence of hydroxyl groups in alcohols I and II and glycol V to be proved by the respective conversion of these compounds into acetals III and IV and acetal VII. In the case of III (b.p. 95 - 96°) and IV (b.p. 95 - 97°), the conversion was effected with vinylbutyl ether and HCl while VII (b.p. 148 - 149°) was obtained from V by means of acetic anhydride. There are 1 table and 5 Soviet bloc references.

Card 3/3





27262

S/020/61/139/005/015/021  
B103/B217

Studies of synthesis and conversions ...

where  $R = CH_3$ ;  $C_2H_5$ ; and  $tert-C_4H_9$ . The existence of two triple bonds in the diacetylene silicon hydrocarbons obtained was proved by hydrogenation of the latter up to saturation. The authors synthesized and characterized for the first time: the three representatives of branched diacetylene silicon hydrocarbons whose constants are given in Table 1. A three-necked flask with reflux cooler served for synthesis. 5-trimethyl silyl-3-methylpentyn-4-ol-3 through which gaseous HCl was bubbled was used for the synthesis of 5-trimethyl dilyl-3-methylpentyne-4-chlorine-3. Synthesis of 1-trimethyl silyl-3,6,6-trimethyl-3-ethyl heptadiene-1,4: Tert-butyl acetylene (8.5 g) in 20 ml ether was added to a Grignard reagent during 25 min under continuous stirring and cooling. After 40 hr standing, the content of the flask was heated on a water bath up to  $35^\circ C$ , and kept at this temperature until the ethane separation ceased. 1 g  $Cu_2Cl_2$  and 0.5 g  $HgCl_2$  were added as catalyst to the resulting complex magnesium bromine tert-butyl acetylene. After 0.5 hr stirring, the mixture was cooled down to  $-2^\circ C$ , and 21.68 g acetylene chloride added. Then, the mixture was stirred during 58 hr at room temperature, heated during 6 hr, and decomposed by diluted HCl. An ether solution and the extract were dried over calcined  $Na_2SO_4$ . After

Card 2/4

27262

S/020/61/139/005/015/021

B103/B217

Studies of synthesis and conversions ...

distilling off the ether, 14 g of the final product was isolated by double distillation. Two further representatives of the said compounds were obtained in similar manner. The authors thank I. F. Zhukova for assisting in the hydrogenation of diacetylene silicon hydrocarbon at the laboratory of Professor L. Kh. Freydlin. Raney-Ni (0.2 g) in 5 ml methanol was used. The mixture was saturated with hydrogen, and then 0.123 silicon hydrocarbon introduced. Altogether 43.61 ml hydrogen was absorbed. 47 ml hydrogen is theoretically necessary for complete hydrogenation of two triple bonds. There are 1 table and 3 Soviet-bloc references.

ASSOCIATION: Institut neftekhimicheskikh protsessov Akademii nauk AzerbSSR (Institute of Petrochemical Processes of the Academy of Sciences of the Azerbaydzhanskaya SSR)

PRESENTED: January 16, 1961 by B. A. Arbuzov, Academician

SUBMITTED: January 11, 1961

Card 3/4

SHIKHIYEV, I.A.; ALIYEV, M.I.; GUSEYNZADE, B.M.

Studies of the synthesis and transformations of unsaturated organosilicon compounds. Synthesis of branched silicon hydrocarbons of the diacetylenic series. Dokl. AN SSSR 139 no.5:1138-1140 Ag '61. (MIRA 14:8)

1. Institut neftekhimicheskikh protsessov AN AzerbSSR.  
Predstavleno akademikom B.A. Arbuzovym.  
(Silicon organic compounds)

43310

S/079/62/032/011/005/012  
D204/D307

5.3700

AUTHORS:

Shikhiyev, I.A., Guseynzade, B.M., and Aliyev, M.I.

TITLE:

Investigations of the synthesis and transformations of oxygen-containing organic and organosilicon compounds. XIV. Organic and organosilicon derivatives of chloral hydrate

PERIODICAL:

Zhurnal obshchey khimii, v. 32, no. 11, 1962, 3630 - 3633

TEXT: The present study was aimed at the consideration of the interactions of chloral hydrate (A) with organic and organosilicon tertiary acetylenic alcohols and simple alkyl vinyl ethers. The products consisted of the corresponding symmetrical trichloroacetals or unsaturated simple ethers of A, depending on the conditions and structures of the reagents concerned. Thus ethoxyethyl-hydroxytrichloroethyl ether of 2,2,2-trichloroethanediol-1,1 (I) was prepared by treating a solution of A in benzene with ethyl vinyl ether cooling, adding a small drop of 33 % HCl, heating to 60-70°C for 1 hr., leaving overnight, neutralization and distillation. Ethoxy-  
Card 1/2

SHIKHIYEV, I.A.; GUSEYIZADE, B.M.; ALIYEV, M.I.

Synthesis and transformations of oxygen-containing organic and organosilicon compounds. Part 14: Organic and organosilicon derivatives of chloral hydrate. Zhur.ob.khim. 32 no.11:3630-3633 N '62. (MIRA 15:11)

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR.

(Chloral)  
(Silicon organic compounds)

SHIKHIYEV, I.A.; VATANKHA, A.A.; RZAYEVA, S.A.; GUSEYNZADE, B.M.

Synthesis and transformations of oxygen-containing organic and  
organosilicon compounds. Azerb. khim. zhur. no.5:27-30 '64.  
(MIRA 18:3)

L 42135-65 EWG(j)/EXT(m)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b)/ENA(h)/ENA(l) Pc-4/  
Pr-4/Peb IJP(c) JD/RM

ACCESSION NR: AP5007719

S/0249/64/020/011/0015/0017

AUTHORS: Shikhiyev, I. A.; Guseynzade, B. M.; Abdullayev, N. D.

TITLE: Investigations of gamma synthesis and conversion of unsaturated oxygen-bearing silicon and germanium organic compounds

SOURCE: AN AzerbSSR Doklady, v. 20, no. 11, 1964, 13-17

TOPIC TAGS: silicon organic polymer, germanium compound, organic derivative, acetylene alcohol

ABSTRACT: This is a continuation of the authors' work in the field of hetero-organic derivatives of acetylene. The present paper concerns the gamma synthesis and conversion of unsaturated oxygen-bearing silicon- and germanium-organic compounds. A method has been developed for producing silicon- and germanium-organic monatomic diacetylene alcohols from diatomic silicon-organic alcohol, and also by reaction between the Iotsich group of some tertiary acetylene alcohols with  $\gamma$ -silicon- and germanium-organic chlorides. The presence of the hydroxyl group in silicon-organic monatomic diacetylene alcohols is demonstrated by dehydration and by cyanethylation. The investigations yielded six different representatives of silicon- and germanium-organic monatomic diacetylene alcohols and their derivatives. These are described for the first time, and their constants are tabulated in the Card 1/2



L 42135-65

ACCESSION NR: AP5007719

article. Orig. art. has: 1 table.

ASSOCIATION: INKhP im. Yu. G. Mamedaliyeva (INKhP)

SUBMITTED: 06Dec63

ENCL: 00

SUB CODE: GC, OC

NO REF SOV: 004

OTHER: 000

Card *2*  
2/2

SHIKHIYEV, I.A.; VATANKHA, A.A.; GUSEYNZADE, B.M.

Synthesis and transformations of oxygen-containing organic and organosilicon compounds. Part 24: Synthesis and transformations of acetylenic formals. Zhur. ob. khim. 35 no.5:812-814 My '65.  
(MIRA 18:6)

1. Institut neftekhimicheskikh protsessov Akademii nauk  
Azerbaydzhanskoy SSR.

L 23835-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6007121

SOURCE CODE: UR/0079/66/036/002/0352/0354

AUTHOR: Shikhiyev, I. A.; Rzayeva, S. A.; Guseynzade, B. M.

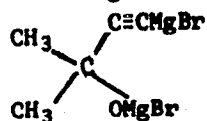
ORG: Institute of Petrochemical Processes, Academy of Sciences, Azerbaydzhan SSR <sup>22</sup> B  
(Institut neftekhimicheskikh protsessov Akademii nauk Azerbaydzhanskoy SSR)

TITLE: Studies in the synthesis and conversion of unsaturated organosilicon compounds.  
Part 27: Branching synthesis of organosilicon alcohols of the biacetylene series

SOURCE: Zhurnal obshchey khimii, v. 36, no. 2, 1966, 352-354 <sup>1</sup>

TOPIC TAGS: organosilicon compound, alcohol, chloride, organomagnesium compound

ABSTRACT: The reactions of the magnesium bromide complex <sup>1</sup>

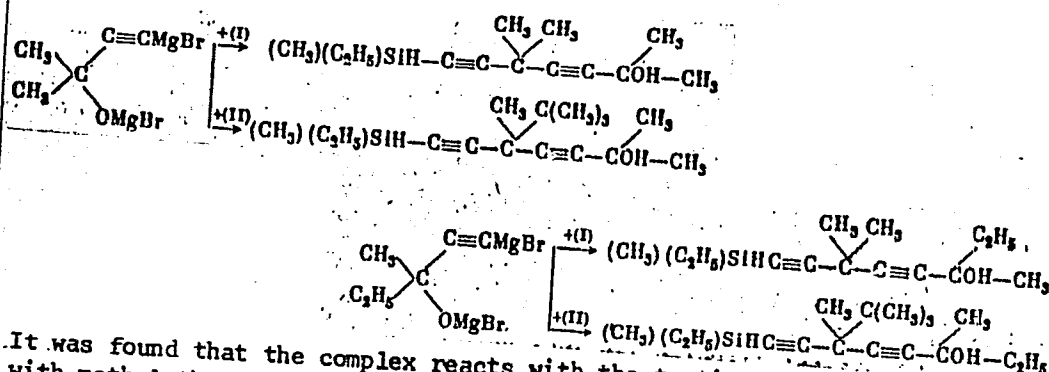


with various tertiary acetylenic organosilicon chlorides were studied. The reactions were as follows:

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L 23835-66

ACC NR: AP6007121



It was found that the complex reacts with the tertiary chlorides more vigorously than with methylethynylcarbinol. Two representatives of tertiary acetylenic organosilicon chlorides, 2-chloro-4-methylethylsilyl-2-methyl-3-butyne and 3-chloro-5-methylethylsilyl-2,2,3-trimethyl-4-pentyne, were described for the first time. The following four representatives of branched monatomic diacetylenic organosilicon alcohols were obtained and characterized for the first time: 7-methylethylsilyl-2,5,5-trimethyl-3,6-heptadiyn-2-ol; 8-methylethylsilyl-3,6,6-trimethyl-4,7-octadiyn-3-ol; 7-methyl-ethylsilyl-2,5-dimethyl-5-tert-butyl-3,6-heptadiyn-2-ol, and 8-methylethylsilyl-3,6-dimethyl-6-tert-butyl-4,7-octadiyn-3-ol. Orig. art. has: 1 table, 4 formulas.

SUB CODE: 07/

SUBM DATE: 23Jan65/

ORIG REF: 003/

OTH REF: 000

Card 2/2 *fv*

L 04550-67 EWT(m)/EWP(j) RM  
ACC NR: AP6025991

SOURCE CODE: UR/0079/66/036/007/1293/1295

32  
26  
B

AUTHOR: Shikhiyev, I. A.; Vatankha, A. A.; Guseyn-zade, B. M.

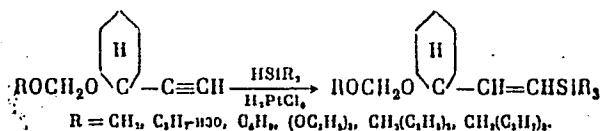
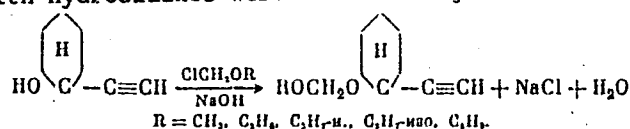
ORG: Institute of Petrochemical Processes, Academy of Sciences Azerbaydzhan SSR  
(Institut neftekhimicheskikh protsessov Akademii nauk Azerbaydzhanskoy SSR)

TITLE: Synthesis of acetylenic formals and their reactions with hydrosilanes

SOURCE: Zhurnal obshchey khimii, v. 36, no. 7, 1966, 1293-1295

TOPIC TAGS: organosilicon compound, organic synthesis

ABSTRACT: The purpose of this investigation was to compare the reactivity of certain acetylenic hydrosilane derivatives. Synthesis of acetylenic cyclohexylformals and their reactions with hydrosilanes were conducted by the following scheme:



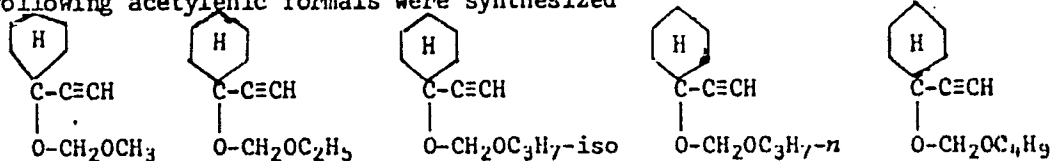
Card 1/3

UDC: 547.362+547.245

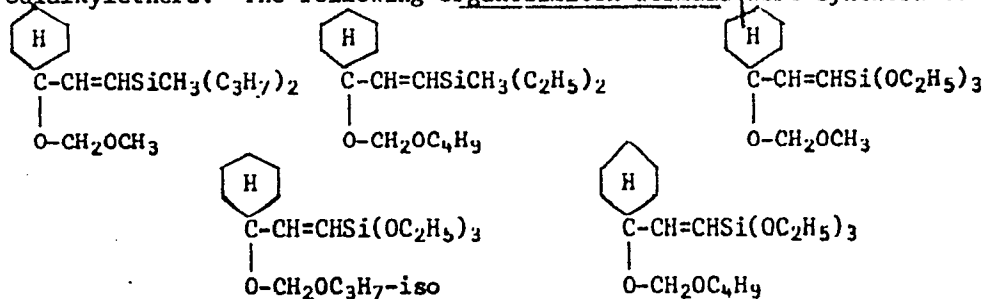
L 04550-67

ACC NR: AP6025991

The following acetylenic formals were synthesized



using acetylenecyclohexanol in absolute ether, sodium hydroxide and corresponding  $\alpha$ -chlorodialkylethers. The following organosilicon formals were synthesized



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L 04550-67

ACC NR: AP6025991

using alkoxymethyl ether of acetylenecyclohexanol and trialkoxysilane with Speier catalyst. A summary table shows the boiling point, refractive index, density, molar refraction and elemental analysis for the above compounds. The five acetylenic organosilicon cyclohexyl formals have been synthesized and characterized for the first time. Orig. art. has: 1 table.

SUB CODE: 07/

SUBM DATE: 27Apr65/

ORIG REF: 001/

OTH REF: 001

Card 3/3 *pls*

GUSEYN-ZADE, E. G.

"Study of the Heat Conductivity of the Local Insulating Materials." Min. Higher Education USSR, Azerbaydizhan Order of Labor Red Banner Industrial Institute imeni M. Azizbekov, Baku, 1955. (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis' No. 22, 1955, pp 93-105



GUSEYN-ZADE, E.G.

Studying heat conductivity of local insulating materials. Trudy  
Azerb. ind. inst. no.16:94-101 '57. (MIRA 11:9)  
(Insulating materials)

GUSEYN-ZADE, E.G.

Theoretical basis of an experimental formula for heat conductivity  
of porous and insulating materials. Trudy Azerb. ind. inst. no.19:  
195-201 '57. (MIRA 11:9)  
(Insulating materials) (Heat--Conduction)

GUSEYNZADE, E.G.; RAMAZANOVA, E.M.; POKROVSKIY, K.V.

Compressibility diagram for individual hydrocarbons of the alkane series at the reduced pressure  $\pi \geq 5.0$  and temperature  $\tau \leq 0.9$ .

Izv. vys. ucheb. zav.; neft' i gaz 3 no.8:59-64 '60.

(MIRA 14:4)

1. Azerbaydzhanskiy institut nefti khimii imeni M.Azizbekova.  
(Paraffins)

GUSEYN-ZADE, G.; KASIMOV, G.

Interceptors and metabolism. Dokl.AN Azerb.SSR 11 no.3:195-199  
'55. (MLRA 9:6)

1.Predstavleno deystvitel'nyy ohlenom Azerbaydzhanskoy SSR A.I.  
Karayevym.  
(Metabolism) (Receptors (Neurology))